IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s)	:	Dzikowicz
Serial No.	:	10/670,169
Filed	:	September 24, 2003
For	:	LATEX FILM COMPOUND WITH IMPROVED TEAR RESISTANCE
Art Unit	:	1713
Examiner	:	Harlan, Robert D.

DECLARATION OF ROBERT THOMAS DZIKOWICZ
UNDER 37 C.F.R. § 1.131

1. I, Robert Thomas Dzikowicz, am the inventor of the invention LATEX FILM COMPOUND WITH IMPROVED TEAR RESISTANCE that is the subject matter of U.S. Patent Application Ser. No. 10/670,169.

2. The invention is a latex film compound which comprises, in pertinent part, an antioxidant and a mercaptoarylazole compound, which functions as a synergist for the antioxidant. The antioxidant synergist mercaptoarylazole compound, when added in combination with a primary antioxidant, enhances the antioxidative effect of the antioxidant. Mercaptoarylazole compounds useful in the invention include 2-mercaptotoluimidazole and 2-mercaptobenzimidazole, or their salts, such as the zinc salt of 2-mercaptotoluimidazole and the zinc salt of 2-mercaptobenzimidazole.

3. The combination of antioxidant and the antioxidant synergist mercaptoarylazole compound is primarily useful in latex film compounds such as

cured latex film compounds which are formed from a reaction product of at least the antioxidant and the antioxidant synergist mercaptoarylazole compound with a polymer and a curing system. Indeed, I developed the combination of antioxidant and the antioxidant synergist mercaptoarylazole compound for the primary purpose of combining the antioxidant and synergist combination with at least a polymer and curing system to develop latex film compounds, such as latex film compounds for carpet backing, foam rug underlay and latex gloves, to name some for the end uses for the present invention.

4. Research on the combination of the antioxidant and the antioxidant synergist mercaptoarylazole compound for use in combination with a polymer and curing system began by at least around March 1998. By around June of 1998, I had completed a dispersion of antioxidant and antioxidant synergist mercaptoarylazole compound for end use testing as a carpet backing and foam rug under lay. This developed and completed composition comprised an antioxidant, AGERITE® STALITE® S, which is a mixture of octylated diphenyl amines and, thus, an amine antioxidant, and an antioxidant synergist mercaptoarylazole compound, VANOX® ZMTI, which comprises zinc salt of 2-mercaptotoluimidazole. The antioxidant and antioxidant synergist was dispersed in water to form a dispersion which also comprised dispersing agent (DARVAN® 1), a stabilizer (15% potassium caseinate) and a wetting agent (IGEPAL® CO-630). This dispersion was then used to make carpet backing and foam rug under lay by being combined with polymer and curing agent, as well as other materials generally used for carpet backing and foam rug under lay.

5. Attached as Exhibit A to this DECLARATION OF ROBERT THOMAS DZIKOWICZ UNDER 37 C.F.R. § 1.131 (the "Declaration") is a copy of an internal memorandum L-5003 (the "L-5003 memorandum") which indicates a start date of March 26, 1998 and a completion date of June 23, 1998 and discusses the dispersion set forth in paragraph 4, above, and the use and testing of this dispersion in carpet backing and foam rug under lay. The dispersion comprising antioxidant and antioxidant synergist mercaptoarylazole compound as described in the L-5003 memorandum were formulated into carpet backing and foam rug underlay. Carpet backing and foam rug underlay are cured latex films and, as such, formulated with the dispersion comprising antioxidant and antioxidant synergist mercaptoarylazole compound, the carpet backing and foam rug underlay are latex films comprising an antioxidant, a mercaptoarylazole compound, a polymer and a curing system. As discussed in the L-5003 memorandum, the combination of antioxidant and synergist worked exceedingly well.

6. Further research and diligent pursuit of the invention continued through 1998 and into 1999, up to, at least February 12, 1999. Attached as Exhibit B to the Declaration is a copy of an internal memorandum, L-5010 (the "L-5010 memorandum"), which indicates a start date of January 20, 1999 and a completion date of June 6, 1999. The L-5010 memorandum addresses the further development of combinations of the antioxidant and antioxidant synergist mercaptoarylazole compound. In addition to zinc salt of 2-mercaptotoluimidazole, the antioxidant synergists included 1, 11-(3,6,9-trioxaundecyl) bis-3-(dodecylthio) propionate and 2-mercaptotoluimidazole, which were combined with a number of antioxidants as set

forth particularly at page 2 of the L-5010 memorandum. These combinations of antioxidant and antioxidant synergist mercaptoarylazole compounds were combined with polymer and curing agent, as well as other conventional components, to formulate and test latex films of natural rubber latex compounds, polychloroprene latex compounds and carpet backing compounds that comprise the reaction product of an antioxidant, a mercaptoarylazole compound, a polymer and a curing system.

7. Attached as Exhibit C to the Declaration is a copy of a January 1999 Latex Monthly Report which is dated January 29, 1999. One of the projects discussed in the January 1999 Latex Monthly Report is the project numbered L-5010 (Dzikowicz/Nola) regarding the combination of the AGERITE® STALITE® S and VANOX® ZMTI for latex film compounds. As addressed in the January 1999 Latex Monthly Report, by January 29, 1999 I had poured this combination of antioxidant and synergist for use with natural rubber to follow with studies in natural rubber/SBR, neoprene and nitrile.

8. All of the documents attached to this Declaration and actions discussed in this Declaration were generated and/or conducted in the United States of America.

9. I completed the invention prior to February 12, 1999 and diligently pursued the invention up to, at least, February 12, 1999.

10. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine

or imprisonment, or both, under § 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Robert Thomas Dzikowicz

Dated: October 19, 2005

RTV-064

L-5003
Started: 3/26/98
Completed: 6/23/98

R. Dzikowicz

Co-Dispersion: AGERITE STALITE S/VANOX ZMTI

OBJECT:

Prepare a co-dispersion of the antioxidant and synergist.

REASON:

Requested by R. Dzikowicz.

CONCLUSION:

The attached recipe was used to prepare samples which were sent to ACT Technologies and Cushion by Design.

DISCUSSION:

Both samples were requested by C. Nola. The end use is carpet backing and foam rug underlay. The combination of antioxidant and synergist worked exceedingly well in studies preformed for Mydrin Company and it is on this basis that the samples were requested. They were identified as experimental and the cover letter sent advised that the co-dispersion was not available commercially. Until a co-dispersion is available, the best we can do is offer C-560(ARSS) purchased from RTV plus ZMTI dispersion purchased from Technical Industries or Akron Dispersions.

RD:dnr

cc: A. Ferradino
K. Kelly
C. Nola

AGERITE STALITE S/VANOX ZMTI

50% Co-Dispersion

	Dry	Wet
AGERITE STALITE S	25	25
VANOX ZMTI	25	25
DARVAN #1	2	2
15% Potassium Caseinate	0.45	3
10% Igepal CO-630*	0.5	5
Water	---	40
	52.95	100

Procedure:

1. Dissolve the DARVAN #1 in water and then add the solution to the ball mill jar.
2. Add the AGERITE STALITE S and the VANOX ZMTI.
3. Grind for one hour, then add ½ of the Igepal CO-630 solution.
4. Grind for 8 hours, then check for foam. If required, add the remaining Igepal CO-630.

*5. Grind for 8 hours, then check for foam again. If required, add additional Igepal CO-630 and grind for 2 hours.

6. Discharge into container and mix in the potassium caseinate with propeller mixer.

L-5010
Started: 1/20/99
Completed: 6/9/99

R. Dzikowicz

Antioxidant Study for Presentation and for Carpet Backing Investigation

Object:

This dual purpose study began as a data collection for a paper on using the Paint & Paper Department's Brightness Meter as a fast and accurate method for estimating relative physical properties. As the study progressed it became clear that the performance of various antioxidant systems in carpet backing compounds could be evaluated by this method, as well.

1. Determine the suitability of the Brightness Meter for evaluating latex films.
2. Collect data for a paper using natural rubber and Neoprene latex compounds.
3. Evaluate antioxidant systems in a carpet backing compound.

Reason:

Collaboration by C. Nola and R. Dzikowicz

Conclusions:

1. Based on past experimental values for heat aging, gas fade tests, long term aging, copper staining and ultra violet light tests I found the Brightness Meter to be a fast and accurate means to determine the relative performance of natural and Neoprene latex films. There was good correlation. For instance, the amine system (VANOX ZMTI/ AGERITE STALITE S) which outperforms the phenolics in physical properties showed the least amount of discoloration in heat aging and long term aging.
2. The paper was completed and will be presented by C. Nola at the Latex Conference in late July. Papers are available upon request.
3. The combination of Wingstay L with the synergist Wingstay SN has been the uncontested antioxidant champion of the carpet industry for many years. The Brightness Meter testing revealed that R. T. Vanderbilt can offer several antioxidants in combination with the synergist VANOX ZMTI that will perform equally well and better than the classic industry system. These are Wingstay L HLS, Vanox GT, Irganox 1010 and Vanlube PCX.

Note: The following acronyms were used in the tables of data.

ANTIOXIDANTS

AO GT	tris-(3,5-di-tert-butyl-hydroxybenzyl)isocyanurate[2]
AO L	butylated reaction product of p-cresol and cyclopentadiene[3]
AO 1290	2,2'-ethylidene bis (4,6-di-tert-butylphenol)[4]
ODPA	octylated diphenylamine[5]
TMQ	1,2-dihydro-2,2,4-trimethylquinoline[6]
BHT	butylated hydroxy toluene[7]
o-MBp14	methylene bis6-tert-butyl p cresol[8]
AO bisA	polybutylated bisphenol A[9]
AO 1010	tetrakis (methylene (3,5-di-tert-butyl-4 -hydroxyhydrocinnamate)) methane[10]

SYNERGISTS

S SN	1,11-(3,6,9-trioxaundecyl) bis-3-(dodecylthio) propionate[11]
MTI	2-mercaptotoluimidizole[12]
ZMTI	zinc 2-mercaptotoluimidazole[13]

Cc: A. Ferradino
L. Dvornek
R.Ohm
K. Kelly
H. Vanderbilt, Jr.
R. Price

NATURAL RUBBER LATEX COMPOUND

Cured 15 min. @ 212ºF

	Bright	L	a	b
ODPA	42.1	74.0	-1.8	12.8
ZMTI/ODPA	41.4	74.3	-1.9	13.9
AO GT	40.8	73.1	-2.0	13.0
AO L	40.3	73.0	-1.7	13.3
AO L/S SN	39.3	72.2	-2.0	13.3
o-MBp14	37.5	70.8	-0.8	13.2
TMQ	24.5	65.2	1.6	20.0

	Bright	L	a	b
ZMTI/ODPA	41.4	74.3	-1.9	13.9
ODPA	42.1	74.0	-1.8	12.8
AO GT	40.8	73.1	-2.0	13.0
AO L	40.3	73.0	-1.7	13.3
AO L/S SN	39.3	72.2	-2.0	13.3
o-MBp14	37.5	70.8	-0.8	13.2
TMQ	24.5	65.2	1.6	20.0

After 5 days @ 70º (158ºF) and 250 psi., Oxygen Bomb Long Term Aging

	Bright	L	a	b
ODPA	30.6	68.8	-0.7	17.7
ZMTI/ODPA	30.6	69.5	-0.7	18.7
AO L	25.3	65.8	0.0	19.7
AO L/S SN	20.6	62.7	5.2	21.4
o-MBp14	20.0	58.6	8.3	17.5
AO GT	18.3	60.3	6.6	21.3
TMQ	6.2	38.6	8.8	16.1

	Bright	L	a	b
ZMTI/ODPA	30.6	69.5	-0.7	18.7
ODPA	30.6	68.8	-0.7	17.7
AO L	25.3	65.8	0.0	19.7
AO L/S SN	20.6	62.7	5.2	21.4
AO GT	18.3	60.3	6.6	21.3
o-MBp14	20.0	58.6	8.3	17.5
TMQ	6.2	38.6	8.8	16.1

After 4 days @ 212ºF, Test Tube Heat Aging

	Bright	L	a	b	Revert
ZMTI/ODPA	26.6	67.3	0.1	20.1	none
ODPA	22.6	62.9	1.9	19.5	begin
AO L/S SN	18.2	60.6	3.0	22.0	begin
AO GT	16.6	62.7	5.6	25.9	yes
o-MBp14	9.9	49.0	11.3	20.6	yes
AO L	9.4	52.7	6.9	24.9	yes
TMQ	4.4	33.1	7.8	14.2	begin

	Bright	L	a	b	Revert
ZMTI/ODPA	26.6	67.3	0.1	20.1	none
ODPA	22.6	62.9	1.9	19.5	begin
AO GT	16.6	62.7	5.6	25.9	yes
AO L/S SN	18.2	60.6	3.0	22.0	begin
AO L	9.4	52.7	6.9	24.9	yes
o-MBp14	9.9	49.0	11.3	20.6	yes
TMQ	4.4	33.1	7.8	14.2	begin

After 20 hours in UV Chamber

	Bright	L	a	b
AO GT	16.8	64.1	-0.3	27.3
AO L/S SN	13.5	61.0	0.8	27.8
AO L	10.6	58.7	2.3	29.0
ZMTI/ODPA	8.6	56.2	3.8	29.2
o-MBp14	6.5	49.5	8.9	25.8
ODPA	4.3	47.4	8.5	27.1
TMQ	3.4	36.8	12.3	19.2

	Bright	L	a	b
AO GT	16.8	64.1	-0.3	27.3
AO L/S SN	13.5	61.0	0.8	27.8
AO L	10.6	58.7	2.3	29.0
ZMTI/ODPA	8.6	56.2	3.8	29.2
o-MBp14	6.5	49.5	8.9	25.8
ODPA	4.3	47.4	8.5	27.1
TMQ	3.4	36.8	12.3	19.2

POLYCHLOROPRENE LATEX COMPOUND

CURED 30 min. @ 285ºF

	Bright	L	a	b
ZMTI/ODPA	17.4	56.0	5.4	17.8
ODPA	16.9	55.2	5.5	17.6
AO L/S SN	15.7	54.1	5.8	18.1
AO bis A	15.6	53.3	5.9	17.2
AO GT	15.5	54.1	5.9	18.4
o-MBp14	15.2	49.9	3.2	14.1
AO L	14.7	52.5	5.8	17.5

	Bright	L	a	b
ZMTI/ODPA	17.4	56.0	5.4	17.8
ODPA	16.9	55.2	5.5	17.6
AO L/S SN	15.7	54.1	5.8	18.1
AO GT	15.5	54.1	5.9	18.4
AO bis A	15.6	53.3	5.9	17.2
AO L	14.7	52.5	5.8	17.5
o-MBp14	15.2	49.9	3.2	14.1

After 4 days at 212ºF, Test Tube Heat Aging

	Bright	L	a	b
ZMTI/ODPA	8.0	40.9	8.2	15.2
ODPA	6.2	37.7	8.3	15.1
AO L/S SN, 5	6.1	38.4	8.3	16.0
o-MBp14	4.8	32.6	7.5	12.7
AO bis A	4.3	33.7	8.5	14.8
AO GT	4.1	32.6	7.6	14.2
AO L	4.0	31.1	9.0	13.1

	Bright	L	a	b
ZMTI/ODPA	8.0	40.9	8.2	15.2
AO L/S SN, 5	6.1	38.4	8.3	16.0
ODPA	6.2	37.7	8.3	15.1
AO bis A	4.3	33.7	8.5	14.8
AO GT	4.1	32.6	7.6	14.2
o-MBp14	4.8	32.6	7.5	12.7
AO L	4.0	31.1	9.0	13.1

After 5 days in O_2 @ 158ºF & 250 psi, Oxygen Bomb Long Term Aging

	Bright	L	a	b
ZMTI/ODPA	12.8	53.5	8.9	21.0
ODPA	10.9	50.9	9.6	20.9
AO L	8.6	48.8	11.2	22.0
o-MBp14	7.8	40.9	8.4	15.6
AO GT	7.6	46.7	11.7	21.6
AO bis A	7.1	46.4	11.8	21.9
AO L/S SN, 5	6.8	46.1	12.3	22.2

	Bright	L	a	b
ZMTI/ODPA	12.8	53.5	8.9	21.0
ODPA	10.9	50.9	9.6	20.9
AO L	8.6	48.8	11.2	22.0
AO GT	7.6	46.7	11.7	21.6
AO bis A	7.1	46.4	11.8	21.9
AO L/S SN, 5	6.8	46.1	12.3	22.2
o-MBp14	7.8	40.9	8.4	15.6

After 24 hours in UV chamber

	Bright	L	a	b
AO L	5.5	46.2	10.1	24.2
AO L/S SN	4.6	45.9	10.5	25.4
AO bis A	3.2	40.4	11.6	22.9
ZMTI/ODPA	3.2	39.1	12.8	21.9
o-MBp14	3.2	35.3	9.3	18.6
ODPA	2.5	38.4	12.7	22.5
AO GT	0.9	28.1	14.2	17.3

	Bright	L	a	b
AO L	5.5	46.2	10.1	24.2
AO L/S SN	4.6	45.9	10.5	25.4
AO bis A	3.2	40.4	11.6	22.9
ZMTI/ODPA	3.2	39.1	12.8	21.9
ODPA	2.5	38.4	12.7	22.5
o-MBp14	3.2	35.3	9.3	18.6
AO GT	0.9	28.1	14.2	17.3

CARPET BACKING COMPOUND

Cured 5 min. @ 280ºF

	Bright	L	a	b
ZMTI/AO 1290	35.4	71.2	-0.4	15.7
ZMTI/AO 1010	34.8	70.3	-0.5	15.2
ZMTI/ODPA	34.6	70.5	-0.2	15.8
ZMTI/AO L	34.1	70.0	-0.3	15.7
ZMTI/BHT	33.8	70.0	-0.2	15.9
ZMTI/AO GT	33.6	69.9	-0.3	16.0
AO L/S SN	33.4	69.4	-0.9	15.7
MTI/AO L	33.3	69.8	-0.4	16.2
TMQ	21.6	62.1	3.8	19.7

	Bright	L	a	b
ZMTI/AO 1290	35.4	71.2	-0.4	15.7
ZMTI/ODPA	34.6	70.5	-0.2	15.8
ZMTI/AO 1010	34.8	70.3	-0.5	15.2
ZMTI/AO L	34.1	70.0	-0.3	15.7
ZMTI/BHT	33.8	70.0	-0.2	15.9
ZMTI/AO GT	33.6	69.9	-0.3	16.0
MTI/AO L	33.3	69.8	-0.4	16.2
AO L/S SN	33.4	69.4	-0.9	15.7
TMQ	21.6	62.1	3.8	19.7

Bleach Soak, 18 hours - Test after 24 hr. drying

	Bright	L	a	b
ZMTI/BHT	38.3	73.3	-1.8	15.6
ZMTI/AO GT	37.4	74.6	-3.4	18.5
ZMTI/AO 1010	36.6	73.1	-2.2	17.1
ZMTI/AO L	36.5	73.7	-2.1	17.9
AO L/S SN	35.1	72.8	-2.1	18.1
ZMTI/AO 1290	34.4	75.0	-5.0	21.7
MTI/AO L	34.4	73.0	-2.1	19.2
ZMTI/ODPA	13.2	47.9	-8.2	14.3
TMQ	5.7	29.3	3.8	7.1

	Bright	L	a	b
ZMTI/AO 1290	34.4	75.0	-5.0	21.7
ZMTI/AO GT	37.4	74.6	-3.4	18.5
ZMTI/AO L	36.5	73.7	-2.1	17.9
ZMTI/BHT	38.3	73.3	-1.8	15.6
ZMTI/AO 1010	36.6	73.1	-2.2	17.1
MTI/AO L	34.4	73.0	-2.1	19.2
AO L/S SN	35.1	72.8	-2.1	18.1
ZMTI/ODPA	13.2	47.9	-8.2	14.3
TMQ	5.7	29.3	3.8	7.1

After 11 hours in UV Chamber

	Bright	L	a	b
ZMTI/AO 1290	18.8	64.9	1.5	26.0
ZMTI/AO GT	18.7	64.4	0.9	25.5
ZMTI/BHT	18.7	64.5	1.0	25.6
ZMTI/AO 1010	18.7	64.5	0.5	25.6
ZMTI/AO L	17.1	63.2	1.7	26.1
MTI/AO L	15.9	61.9	2.5	26.0
AO L/S SN	15.7	61.5	1.8	25.8
ZMTI/ODPA	14.2	60.2	3.0	26.3
TMQ	5.0	41.8	10.9	21.1

	Bright	L	a	b
ZMTI/AO 1290	18.8	64.9	1.5	26.0
ZMTI/BHT	18.7	64.5	1.0	25.6
ZMTI/AO 1010	18.7	64.5	0.5	25.6
ZMTI/AO GT	18.7	64.4	0.9	25.5
ZMTI/AO L	17.1	63.2	1.7	26.1
MTI/AO L	15.9	61.9	2.5	26.0
AO L/S SN	15.7	61.5	1.8	25.8
ZMTI/ODPA	14.2	60.2	3.0	26.3
TMQ	5.0	41.8	10.9	21.1

CARPET BACKING COMPOUND (page 2)

Heat Aging, 7 days @ 212ºF

	Bright	L	a	b
ZMTI/ODPA	28.0	67.3	0.7	18.7
ZMTI/AO 1010	27.4	67.0	0.5	19.0
ZMTI/AO L	26.7	66.7	1.0	19.3
ZMTI/AO GT	26.6	66.7	0.5	19.5
ZMTI/AO 1290	26.5	66.8	0.9	19.7
ZMTI/BHT	26.5	66.4	0.4	19.2
MTI/AO L	24.5	64.7	1.3	19.4
AO L/S SN	23.7	64.3	1.2	19.9
TMQ	8.9	43.7	7.2	16.7

	Bright	L	a	b
ZMTI/ODPA	28.0	67.3	0.7	18.7
ZMTI/AO 1010	27.4	67.0	0.5	19.0
ZMTI/AO 1290	26.5	66.8	0.9	19.7
ZMTI/AO GT	26.6	66.7	0.5	19.5
ZMTI/AO L	26.7	66.7	1.0	19.3
ZMTI/BHT	26.5	66.4	0.4	19.2
MTI/AO L	24.5	64.7	1.3	19.4
AO L/S SN	23.7	64.3	1.2	19.9
TMQ	8.9	43.7	7.2	16.7

Heat Aging, 7 days @ 250ºF

	Bright	L	a	b
ZMTI/ODPA	14.1	56.0	5.2	22.1
ZMTI/AO 1010	13.4	56.3	5.2	23.2
ZMTI/AO GT	10.0	51.8	6.9	23.2
ZMTI/BHT	9.7	51.1	7.2	22.9
AO L/S SN	9.4	48.8	7.3	21.1
ZMTI/AO L	9.0	49.3	7.3	22.1
MTI/AO L	6.9	44.5	8.4	20.6
ZMTI/AO 1290	5.7	43.1	12.2	20.9
TMQ	3.5	29.4	6.2	12.4

	Bright	L	a	b
ZMTI/AO 1010	13.4	56.3	5.2	23.2
ZMTI/ODPA	14.1	56.0	5.2	22.1
ZMTI/AO GT	10.0	51.8	6.9	23.2
ZMTI/BHT	9.7	51.1	7.2	22.9
ZMTI/AO L	9.0	49.3	7.3	22.1
AO L/S SN	9.4	48.8	7.3	21.1
MTI/AO L	6.9	44.5	8.4	20.6
ZMTI/AO 1290	5.7	43.1	12.2	20.9
TMQ	3.5	29.4	6.2	12.4

Long Term Aging, Oxygen Bomb, 200 psi, 60ºC (140ºF)

	Bright	L	a	b
ZMTI/AO 1290	39.9	68.8	0.4	18.4
ZMTI/ODPA	30.7	69.5	-0.3	18.5
ZMTI/AO L	28.6	68.9	0.7	19.9
ZMTI/AO 1010	28.6	68.2	0.5	19.1
ZMTI/BHT	28.5	68.2	0.5	19.2
ZMTI/AO GT	28.0	67.3	0.6	18.7
AO L/S SN	27.6	67.8	0.3	19.8
MTI/AO L	26.9	67.4	1.7	20.0
TMQ	8.0	40.9	9.0	15.3

	Bright	L	a	b
ZMTI/ODPA	30.7	69.5	-0.3	18.5
ZMTI/AO L	28.6	68.9	0.7	19.9
ZMTI/AO 1290	39.9	68.8	0.4	18.4
ZMTI/BHT	28.5	68.2	0.5	19.2
ZMTI/AO 1010	28.6	68.2	0.5	19.1
AO L/S SN	27.6	67.8	0.3	19.8
MTI/AO L	26.9	67.4	1.7	20.0
ZMTI/AO GT	28.0	67.3	0.6	18.7
TMQ	8.0	40.9	9.0	15.3

CARPET BACKING COMPOUND (page 3)

Nox Alternate Method, Hot Solution for 6 hours - Test After 24 hr. Drying

	Bright	L	a	b
ZMTI/ODPA	21.7	65.4	-1.0	23.6
ZMTI/AO 1010	14.5	54.1	-1.6	20.0
ZMTI/AO 1290	12.8	50.2	1.1	18.0
AO L/S SN	12.8	57.5	-0.3	25.3
ZMTI/BHT	11.7	47.4	0.2	16.7
ZMTI/AO GT	11.7	50.4	-0.3	19.7
MTI/AO L	11.4	56.9	1.6	26.4
ZMTI/AO L	8.8	49.1	1.3	22.3
TMQ	4.9	27.5	12.0	6.9

	Bright	L	a	b
ZMTI/ODPA	21.7	65.4	-1.0	23.6
AO L/S SN	12.8	57.5	-0.3	25.3
MTI/AO L	11.4	56.9	1.6	26.4
ZMTI/AO 1010	14.5	54.1	-1.6	20.0
ZMTI/AO GT	11.7	50.4	-0.3	19.7
ZMTI/AO 1290	12.8	50.2	1.1	18.0
ZMTI/AO L	8.8	49.1	1.3	22.3
ZMTI/BHT	11.7	47.4	0.2	16.7
TMQ	4.9	27.5	12.0	6.9

cb-Copper Staining Rankings, 24 hours @ 250ºF

ZMTI/AO GT **ZMTI/AO L** **MTI/AO L** **ZMTI/AO 1010**	Very Good
ZMTI/AO 1290 **ZMTI/AO L**	Good
ZMTI/BHT	Fair
TMQ **AO L/S SN**	Poor

January 29,1999

To: A. Ferradino

From: R. Dzikowicz

Subject: Latex Monthly Report – January 1999

L-5009 (Dzikowicz)

The SETSITS

Finally complete! All salesmen, Domestic and International, have copies of The Book of SETSITS and the presentation pad.

L-5010 (Dzikowicz/Nola)

Agerite Stalite S/Vanox ZMTI: In Depth Study with View to Presentation at 1999 Latex Symposium

Compounds have been poured for the study in natural rubber. To follow are studies in nat. rub./SBR, Neoprene and Nitrile.

L-5008 (Dzikowicz/Vanderhoof)

VANTACK 85 Emulsions: Continued

A new stainless steel Waring Blender was purchased for making the emulsions. The Vanplast PL, While compatible with the resin completely masked the tacky quality of the original resin. Wingtack 10, a very low molecular weight hydrocarbon resin, blended well with the VANTACK and the emulsion was fine at elevated temperatures but after coolingl became grainy. Much more work is required.

Assisted the Rubber Lab with oven aging tests (Y-1505).

Technical Data Sheets updated.

Then there was the taxidermist who gave his pet parrot mounting apprehension.